



IFWO

RAW SEQUENCE LISTING

DATE: 08/04/2004

PATENT APPLICATION: US/10/723,147

TIME: 08:28:23

Input Set : N:\Crif3\RULE60\10723147.raw

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1 <110> APPLICANT: Beraud, Christophe
2   Craven, Andrew
3   Yu, Ming
4   Sakowicz, Roman
5   Patel, Umesh A.
6   Davies, Katherine A.
7 <120> TITLE OF INVENTION: NOVEL MOTOR PROTEINS AND METHODS FOR THEIR USE
8 <130> FILE REFERENCE: 020552-001410US
9 <140> CURRENT APPLICATION NUMBER: US/10/723,147
10 <141> CURRENT FILING DATE: 2003-11-25
11 <150> PRIOR APPLICATION NUMBER: US/09/883,096
12 <151> PRIOR FILING DATE: 2001-06-15
13 <150> PRIOR APPLICATION NUMBER: US 09/594,655
14 <151> PRIOR FILING DATE: 2000-06-15
15 <160> NUMBER OF SEQ ID NOS: 6
16 <170> SOFTWARE: PatentIn Ver. 2.1
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 4108
20 <212> TYPE: DNA
21 <213> ORGANISM: Artificial Sequence
22 <220> FEATURE:
23 <223> OTHER INFORMATION: Nucleic acid sequence of human kinesin motor
24   protein gene HsKip3a (Figure 1).
25 <223> OTHER INFORMATION: Description of Artificial Sequence: HsKip3a gene.
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98 <211> LENGTH: 864
99 <212> TYPE: PRT
100 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:
102 <223> OTHER INFORMATION: Amino acid sequence encoded by human kinesin motor
103      protein gene HsKip3a (Figure 1).
104 <223> OTHER INFORMATION: Description of Artificial Sequence:Amino acid
105      sequence of HsKip3a.
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107      Met Ala Val Glu Asp Ser Thr Leu Gln Val Val Val Arg Val Arg Pro
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111      Val Asp Glu Arg Val Leu Val Phe Asn Pro Glu Glu Pro Asp Gly Gly
112      35          40          45
113      Phe Pro Gly Leu Lys Trp Gly Gly Thr His Asp Gly Pro Lys Lys Lys
114      50          55          60
115      Gly Lys Asp Leu Thr Phe Val Phe Asp Arg Val Phe Gly Glu Ala Ala
116      65          70          75          80
117      Thr Gln Gln Asp Val Phe Gln His Thr Thr His Ser Val Leu Asp Ser
118      85          90          95
119      Phe Leu Gln Gly Tyr Asn Cys Ser Val Phe Ala Tyr Gly Ala Thr Gly
120      100          105          110
121      Ala Gly Lys Thr His Thr Met Leu Gly Arg Glu Gly Asp Pro Gly Ile
122      115          120          125
123      Met Tyr Leu Thr Thr Val Glu Leu Tyr Arg Arg Leu Glu Ala Arg Gln
124      130          135          140
125      Gln Glu Lys His Phe Glu Val Leu Ile Ser Tyr Gln Glu Val Tyr Asn
126      145          150          155          160
127      Glu Gln Ile His Asp Leu Leu Glu Pro Lys Gly Pro Leu Ala Ile Arg
128      165          170          175
129      Glu Asp Pro Asp Lys Gly Val Val Val Gln Gly Leu Ser Phe His Gln
130      180          185          190
131      Pro Ala Ser Ala Glu Gln Leu Leu Glu Ile Leu Thr Arg Gly Asn Arg
132      195          200          205
133      Asn Arg Thr Gln His Pro Thr Asp Ala Asn Ala Thr Ser Ser Arg Ser
134      210          215          220
135      His Ala Ile Phe Gln Ile Phe Val Lys Gln Gln Asp Arg Val Pro Gly
136      225          230          235          240
137      Leu Thr Gln Ala Val Gln Val Ala Lys Met Ser Leu Ile Asp Leu Ala
138      245          250          255
139      Gly Ser Glu Arg Ala Ser Ser Thr His Ala Lys Gly Glu Arg Leu Arg
140      260          265          270
141      Glu Gly Ala Asn Ile Asn Arg Ser Leu Leu Ala Leu Ile Asn Val Leu
142      275          280          285
143      Asn Ala Leu Ala Asp Ala Lys Gly Arg Lys Thr His Val Pro Tyr Arg

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148          325          330          335
149  Asp Thr Tyr Asn Thr Leu Lys Tyr Ala Asp Arg Ala Lys Glu Ile Arg
150          340          345          350
151  Leu Ser Leu Lys Ser Asn Val Thr Ser Leu Asp Cys His Ile Ser Gln
152          355          360          365
153  Tyr Ala Thr Ile Cys Gln Gln Leu Gln Ala Glu Val Ala Ala Leu Arg
154          370          375          380
155  Lys Lys Leu Gln Val Tyr Glu Gly Gly Gly Gln Pro Pro Pro Gln Asp
156  385          390          395          400
157  Leu Pro Gly Ser Pro Lys Ser Gly Pro Pro Glu His Leu Pro Ser
158          405          410          415
159  Ser Pro Leu Pro Pro His Pro Pro Ser Gln Pro Cys Thr Pro Glu Leu
160          420          425          430
161  Pro Ala Gly Pro Arg Ala Leu Gln Glu Glu Ser Leu Gly Met Glu Ala
162          435          440          445
163  Gln Val Glu Arg Ala Met Glu Gly Asn Ser Ser Asp Gln Glu Gln Ser
164          450          455          460
165  Pro Glu Asp Glu Asp Glu Gly Pro Ala Glu Glu Val Pro Thr Gln Met
166  465          470          475          480
167  Pro Glu Gln Asn Pro Thr His Ala Leu Pro Glu Ser Pro Arg Leu Thr
168          485          490          495
169  Leu Gln Pro Lys Pro Val Val Gly His Phe Ser Ala Arg Glu Leu Asp
170          500          505          510
171  Gly Asp Arg Ser Lys Gln Leu Ala Leu Lys Val Leu Cys Val Ala Gln
172          515          520          525
173  Arg Gln Tyr Ser Leu Leu Gln Ala Ala Asn Leu Leu Thr Pro Asp Met
174          530          535          540
175  Ile Thr Glu Phe Glu Thr Leu Gln Gln Leu Val Gln Glu Glu Lys Ile
176  545          550          555          560
177  Glu Pro Gly Ala Glu Ala Leu Arg Thr Ser Gly Leu Ala Arg Gly Ala
178          565          570          575
179  Pro Leu Ala Gln Glu Leu Cys Ser Glu Ser Ile Pro Val Pro Ser Pro
180          580          585          590
181  Leu Cys Pro Glu Pro Pro Gly Tyr Thr Gly Pro Val Thr Arg Thr Met
182          595          600          605
183  Ala Arg Arg Leu Ser Gly Pro Leu His Thr Leu Gly Ile Pro Pro Gly
184          610          615          620
185  Pro Asn Cys Thr Pro Ala Gln Gly Ser Arg Trp Pro Met Glu Lys Lys
186  625          630          635          640
187  Arg Arg Arg Pro Ser Ala Leu Glu Ala Asp Ser Pro Met Ala Ser Lys
188          645          650          655
189  Arg Gly Thr Lys Arg Gln Arg Gln Ser Phe Leu Pro Cys Leu Arg Arg
190          660          665          670
191  Gly Ser Leu Pro Asp Thr Gln Pro Ser Gln Gly Pro Ser Thr Pro Lys
192          675          680          685

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197      Cys Ser Thr Pro Leu Ala Leu Pro Thr Arg Asp Leu Asn Ala Thr Phe
198      725                                730                                735
199      Asp Leu Ser Glu Glu Pro Pro Ser Lys Pro Ser Phe His Glu Cys Ile
200      740                                745                                750
201      Gly Trp Asp Lys Ile Pro Gln Glu Leu Ser Arg Leu Asp Gln Pro Phe
202      755                                760                                765
203      Ile Pro Arg Ala Pro Val Pro Leu Phe Thr Met Lys Gly Pro Lys Pro
204      770                                775                                780
205      Thr Ser Ser Leu Pro Gly Thr Ser Ala Cys Lys Lys Lys Arg Val Ala
206      785                                790                                795                                800
207      Ser Ser Ser Val Ser His Gly Arg Ser Arg Ile Ala Arg Leu Pro Ser
208      805                                810                                815
209      Ser Thr Leu Lys Arg Pro Ala Gly Pro Leu Val Leu Pro Glu Leu Pro
210      820                                825                                830
211      Leu Ser Pro Leu Cys Pro Ser Asn Arg Arg Asn Gly Lys Asp Leu Ile
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217 <211> LENGTH: 1014
218 <212> TYPE: DNA
219 <213> ORGANISM: Artificial Sequence
220 <220> FEATURE:
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222      fragment
223 <223> OTHER INFORMATION: Nucleotide sequence encoding motor domain fragment
224      of HsKip3a (Figure 2).
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228      ccgatggag ggttccttgg cctgaaatgg ggtggcacc atgatggccc caagaagaag 180
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231      gtgtttgcct acggggccac cggggctggg aagacacaca ccatgctggg aaggaggagg 360
232      gaccccgga tcatgtacct gaccaccgtg gaactgtaca ggcgcctgga ggcccgcag 420
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Output Set: N:\CRF4\08042004\J723147.raw

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